



Course title: ANDROLOGY AND ARTIFICIAL INSEMINATION

ECTS credit allocation (and other scores):3

Semester: spring

Level of study: ISCED-7- long-cycle programmes (EQF-7)

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 45

Course coordinator/ Department and e-mail: Sławomir Zduńczyk , zdun@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: Structure of male reproductive system in domestic animals, assessment of semen quality (macroscopic evaluation, laboratory methods, CASA), preservation and storage of semen, andrological examination of bulls, bull semen collection and analysis, pre-service examination of cows, insemination technique with frozen semen in cows, andrological examination of stallions, artificial insemination of mares with fresh and frozen semen, andrological examination of dogs, canine semen collection and analysis, artificial insemination of bitches (determination of optimal breeding time, insemination technique with fresh and frozen semen), andrological examination of rams and bucks, semen collection (electroejaculation), insemination technique with fresh and frozen semen, andrological examination of boars, semen collection (manual), semen analysis and insemination techniques (tubes, Gedis)

LECTURES: Physiology of reproductive system of male animals, AI organization of farm animals, diseases of reproductive system of the bull, law regulation for production and use of bovine semen and keeping of breeding station, diseases of reproductive system of the male dog, AI in dogs, diseases of reproductive system of the stallion, AI in horses, law regulation for production and use of equine semen and keeping of breeding station, diseases of reproductive system of the boar, AI in pigs, law regulation for production and use of porcine semen and keeping of breeding station, diseases of reproductive system of the ram and the buck, AI in sheep and goats, law regulation for production and use of ram and buck semen

Learning purpose: The aim of education is to acquire knowledge and skills in terms of physiology and pathology of animal reproduction and artificial insemination min.

On completion of the study programme the graduate will gain:

Knowledge: After completing the course the student know anatomy and physiology of male reproductive system with consideration of species specify, diseases of male reproductive system, methods of collection, quality assessment and preservation of semen, methods of AI, law regulation for production and use of semen and keeping of breeding station

Skills: After completing the course the student is able to determine the reproductive ability of the male, collect and analyze of semen, AI perform, diagnose and treat of male reproductive system diseases, analyze and select of information

Social Competencies: The student demonstrate initiative and analyze active knowledge of the course; the student follows the rules of veterinary deontology

Basic literature: England, G. Allen's Fertility & Obstetrics in the Dog. Wiley-Blackwell, 2 edition, 1998.

Gimenez, D. Reproductive Management of Goats and Sheep. Alabama Cooperative Extension System. Bull. ANR-1316, 2007.

Hopper, R.M. Bovine Reproduction. Wiley-Blackwell, 2 edition, 2014.

Manafi, M. Artificial Insemination in Farm Animals. InTech, 2011.

McKinnon, A.O. (ed.): Equine Reproduction. Wiley-Blackwell, 2 edition, 2011.

McKenzie-Jakes, P. Reproduction and Breeding Management of Goats and Sheep. Florida A & M University Cooperative Extension Programs .Bull. I, Vol. VIII, 2007.

Supplementary literature: Bearden, J.E., Fuquay, J. Applied Animal Reproduction. Reston Publishing Company, 1984.

Root Kustritz, M. Clinical Canine and Feline Reproduction. Wiley-Blackwell, 2009.

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 45

Student's independent work:30